

*Prepared for*

**DuPont Specialty Products USA, LLC**

P.O. Box 1364

Watkinsville, Georgia 30677

# **SITE INVESTIGATION WORK PLAN**

**DuPont Chambers Works Leasehold**

**Deepwater, New Jersey**

**ISRA Case E2019176036**

*Prepared by*

**Geosyntec**   
consultants

engineers | scientists | innovators

1750 American Boulevard, Suite 200  
Hopewell, New Jersey 08534

Project Number JR0217

**August 28, 2020**

## TABLE OF CONTENTS

1.	INTRODUCTION, SCOPE, AND INTENT OF THE WORKPLAN.....	1
2.	SITE BACKGROUND, DESCRIPTION AND AREAS OF CONCERN.....	1
3.	GOALS AND OBJECTIVES OF INVESTIGATION ACTIVITIES .....	2
4.	PROCEDURES AND METHODOLOGIES .....	2
4.1	Task 1 – Utility Mark-Out and Subsurface Clearance Survey.....	2
4.2	Task 2 – Soil Boring Sampling .....	2
4.2.1	Soil Core Lithologic Logging and Field Screening .....	3
4.2.2	Soil Sample Collection and Analysis.....	3
4.2.3	Soil Boring Abandonment.....	4
4.2.4	Soil Sampling Equipment Cleaning.....	4
4.3	Laboratory Data Evaluation and Storage.....	4
4.4	Permitting .....	4
4.5	Health and Safety .....	4
4.6	Waste Management .....	4
5.	QUALITY ASSURANCE PROJECT PLAN .....	5
6.	REPORTING.....	5
7.	SCHEDULE .....	5

## **LIST OF FIGURES**

- Figure 1      Areas of Concern – Fluoroelastomer Material Development Lab Area
- Figure 2      AOC Sample Decision Matrix

## **LIST OF TABLES**

- Table 1      Proposed AOC Soil Sample Summary

## **1. INTRODUCTION, SCOPE, AND INTENT OF THE WORKPLAN**

This Site Investigation Work Plan (Work Plan) for investigations at the former DuPont Leasehold (Leasehold) located at The Chemours Company's (Chemours) Chambers Works facility (CW Facility) in Deepwater, New Jersey (the Site) has been prepared in accordance with the requirements of the New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (TRSRs or "Tech Regs"), (N.J.A.C. 7:26E) (NJDEP, 2011). Geosyntec Consultants, Inc. (Geosyntec) has prepared this Work Plan for and on behalf of DuPont Specialty Products USA, LLC (DuPont).

On 31 May 2019, E. I. du Pont de Nemours and Company triggered compliance with the NJDEP Industrial Site Recovery Act (ISRA) regulations when ownership of one leasehold area was transferred to a newly formed company (DuPont Specialty Products USA, LLC). As required by N.J.A.C. 7:26C-2.3, DuPont retained Mr. Thomas Geiger, Licensed Site Remediation Professional (LSRP) License 575437, to provide regulatory oversight of the ISRA case. The NJDEP subsequently assigned ISRA Case No. E2019176036 to this case.

The activities outlined in this Work Plan propose additional field inspection and the collection of soil samples for Areas of Concern (AOCs) that may have discharged/received a discharge after 1 July 2015, the date after which E. I. du Pont de Nemours and Company leased the property from Chemours. Business operations were transferred from E.I du Pont de Nemours and Company to DuPont on 31 May 2019. The AOCs and proposed sample locations presented in this Work Plan were identified following a review of the available historical Site and Leasehold data and visits to the site by the LSRP and Geosyntec staff.

## **2. SITE BACKGROUND, DESCRIPTION AND AREAS OF CONCERN**

Geosyntec evaluated Site documents and data provided by Chemours for historical and on-going investigation and remediation being conducted under the USEPA and NJDEP. Additionally, DuPont facility personnel were interviewed and historical documents reviewed to obtain information regarding operations conducted in each area, materials used or generated from the processes, and the time frame for the operations. Site visits were conducted to obtain information regarding the current condition of each area and AOC and to identify any AOCs not in the records reviewed. This Preliminary Assessment (PA) Report was prepared to document the details of the Preliminary Assessment and the subsequent development of a sampling plan to complete the required Site Investigation (SI) activities; a combined PA/SI Report, will be submitted to the NJDEP as required by ISRA and TRSR. The DuPont leasehold area operations include manufacture of fluoroelastomers and administrative support. The leasehold area is identified as Area I – Fluoroelastomer Market Development Lab (FMDL) Area in this ISRA case documents based on the current and historical use. Areas A through H and J are included in separate DuPont ISRA cases that are not included in this Work Plan.

### **3. GOALS AND OBJECTIVES OF INVESTIGATION ACTIVITIES**

The objective of this site investigation is the collection and evaluation of data adequate to evaluate if hazardous substances discharged to Site soil or groundwater and exist at concentrations in excess of the applicable remediation standards. The site investigation has been developed based upon the information collected during the preliminary assessment. Based on the data generated during the site investigation of soil, the need for a subsequent groundwater investigation will be evaluated. Finally, conclusions and recommendations for each AOC will be presented in the PA/SI Report.

### **4. PROCEDURES AND METHODOLOGIES**

#### **4.1 Task 1 – Utility Mark-Out and Subsurface Clearance Survey**

Prior to the commencement of the intrusive investigatory activities discussed in this Work Plan, a utility mark-out will be requested through the New Jersey One Call center and an on-Site subsurface utility survey will be performed by a geophysical contractor. In addition, Geosyntec will obtain any required DuPont permits for the proposed work, which may include Excavation Permits or Hot Work Permits. The subsurface utility survey will be performed within proposed sample collection areas, and will involve the use of ground penetrating radar, electromagnetic induction technologies, and other appropriate methods as required. The location of utilities or subsurface anomalies identified during the utility survey will be obtained through the use of a handheld Geographic Positioning System (GPS) receiver.

#### **4.2 Task 2 – Soil Boring Sampling**

The AOCs in Figure 1 and Table 1 are categorized as follows:

- **Field Investigation Needed:** based on available information, the AOC requires the collection of soil samples due to the potential for a discharge.
- **Additional Information and Possible Field Investigation Needed:** the information thus far obtained is insufficient to make a sampling recommendation or, the presence of the AOC cannot be confirmed and an additional site visit is required.
- **No Field Investigation Needed:** based on available information, this AOC does not require the collection of samples.
- **Historical AOC or AOC is the responsibility of others:** based on available information, operations at this AOC ceased prior to 1 July 2015 or they are incorporated into ongoing remediation by another party, e.g. Chemours, under separate State and Federal programs/cases.

For each AOC, Table 1 provides a description of the AOC, a summary of the preliminary findings from the review of the historical site data and site visits, a description of the proposed samples,

proposed analytical parameters, proposed sample depths, number of proposed borings, and number of proposed samples. AOC locations are depicted on Figure 1. The decision matrix for the selection of sampling locations is presented in Figure 2.

#### 4.2.1 Soil Core Lithologic Logging and Field Screening

Soil boring locations will be cleared prior to intrusive activity using hand augers and/or air knife equipment to five feet below ground surface. Borings will be to the required depth using a direct push drilling rig, operated by a NJ licensed driller. At locations where a concrete slab is present at surface (e.g. building slab), the concrete will be cored by a concrete coring company, as necessary, prior to sampling of the subsurface soils. Lithologic logging and field screening of soil cores shall be performed by Geosyntec using methods which are in accordance with the TRSR and the NJDEP Field Sampling Procedures Manual (FSPM) (NJDEP, 2005). Soil core logging will follow a standard soil classification system and soil cores will be screened for volatile organic compounds at 6-inch intervals and at any visually impacted intervals using a photoionization detector (PID). The PID will be fitted with a 10.6 eV lamp and calibrated with gas containing 100 part per million isobutylene at the start of each day of use. Geosyntec will prepare logs for all soil borings to document subsurface conditions including soil types and description of non-soil materials, field instrument measurements, depth to ground water, if ground water is encountered, and to document, if present, soil mottling, presence of odor, vapors, soil discoloration, and free and/or residual product, pursuant to N.J.A.C. 7:26E-2.1(a)14. All soil boring locations and soil cores will be photographed.

#### 4.2.2 Soil Sample Collection and Analysis

Soil samples will be collected from the sample depth either exhibiting the most impacts, as determined through visual or field screening, or from the sample depth most likely to have received a discharge. In addition, one sample will be collected from a deeper sample interval at each location for vertical delineation, if required. These deeper samples will be placed on hold, pending analytical results from the overlying shallow sample interval(s).

Soil samples will be collected in accordance with the TRSR and the FSPM. Duplicate, equipment blank, field blank, and matrix spike/matrix spike duplicate samples will be collected and submitted for analysis. The frequency of these analyses is the Quality Assurance Project Plan (QAPP) discussed in Section 5.

Samples will be placed in laboratory-provided containers, labeled, and transported on ice under chain of custody protection to an NJDEP certified laboratory. Geosyntec will request that the analytical laboratory comply with the NJDEP Data of Known Quality Protocols (DKQP) as detailed in Section 4.3. A standard turn-around time of 14 days will be requested for receipt of sample data. The laboratory may be requested to extract and hold the analysis of contingency samples to comply with applicable analytical method holding times. The analytical data packages will conform to the reduced deliverable format specified in N.J.A.C. 7:26E and will include a PDF of the report, Excel table, and database files. All analytical sampling will be coordinated through AECOM's Analytical Data

Quality Management (ADQM) group under DuPont project number 509516 (Chambers Works Closure Filing). Geosyntec will also maintain a database of the data collected within the DuPont leaseholds as defined in this scope of work.

#### **4.2.3 Soil Boring Abandonment**

All soil borings will be abandoned in accordance with the FSPM and N.J.A.C. 7:9D Well Construction and Maintenance. Soils from the borings will be managed in accordance with Section 4.6.

#### **4.2.4 Soil Sampling Equipment Cleaning**

Between boring locations, the stainless-steel core barrels and soil sample collection utensils will be cleaned following the decontamination protocols in the FSPM.

### **4.3 Laboratory Data Evaluation and Storage**

Electronic data deliverables of all laboratory data packages will be forwarded to AECOM, which maintains a database of laboratory analytical data related to the CW Facility. AECOM will evaluate the data by following the DuPont in-house Data Validation Process, and Geosyntec will complete the data evaluation in accordance with the NJDEP DKQP requirements.

### **4.4 Permitting**

No Federal, State or local permits are required for any of the activities described in this Work Plan. DuPont site specific hot work and excavation permits will be acquired prior to completing the sampling.

### **4.5 Health and Safety**

Geosyntec will develop a Health and Safety Plan (HASP) for the field activities, including protocols related to COVID-19, and will hold DuPont-specific Plan of Action Discussion (POAD) and Project Safety Analysis (PSA) meetings prior to commencing with the work. All personnel who perform work on the Site will be familiar with, and will adhere to, the health and safety protocols and procedures outlined in the HASP and POAD/PSA documents and will complete all required Site-specific safety training, background check, security clearance, and orientation.

### **4.6 Waste Management**

All investigation-derived waste generated during the investigatory activities described in this Work Plan will be containerized on Site. Soil cuttings will be returned to the borehole in accordance with N.J.A.C. 7:9D. Personal protective equipment, plastic macrocores, and other disposable equipment coming into contact with the soil will be containerized in separate 55-gallon steel drums. Liquids generated during decontamination of drill rods, hand augers, stainless steel scoops, and any other

reusable equipment coming into contact with the soil will be containerized in steel 55-gallon drums or, if the quantity is small, into 5-gallon pails, pending the required characterization and disposal. The characterization and disposal of the waste will be managed by AECOM in accordance with DuPont standard procedures following a waste management plan provided by AECOM.

## 5. QUALITY ASSURANCE PROJECT PLAN

A Quality Assurance Project Plan (QAPP) has been prepared in accordance with the NJDEP's DKQP and DuPont's internal quality assurance/quality control procedures.

## 6. REPORTING

Following the completion of the activities outlined in this Work Plan an evaluation of the collected data will be incorporated into a PA/SI Report for submission to the NJDEP. Geosyntec will also coordinate the required submission of the NJDEP HAZSITE EDD data files generated from this SI with the ADQM group.

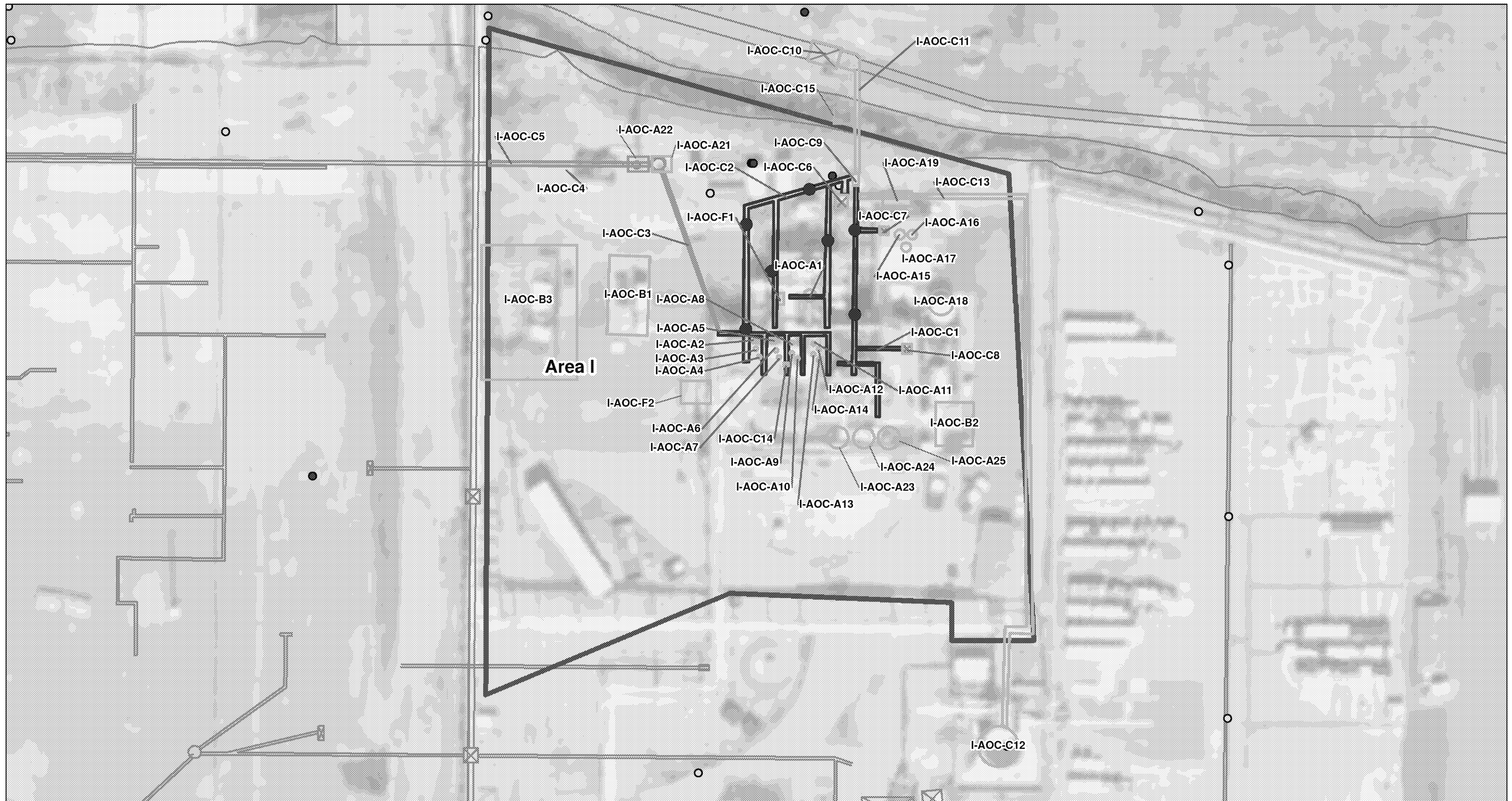
## 7. SCHEDULE

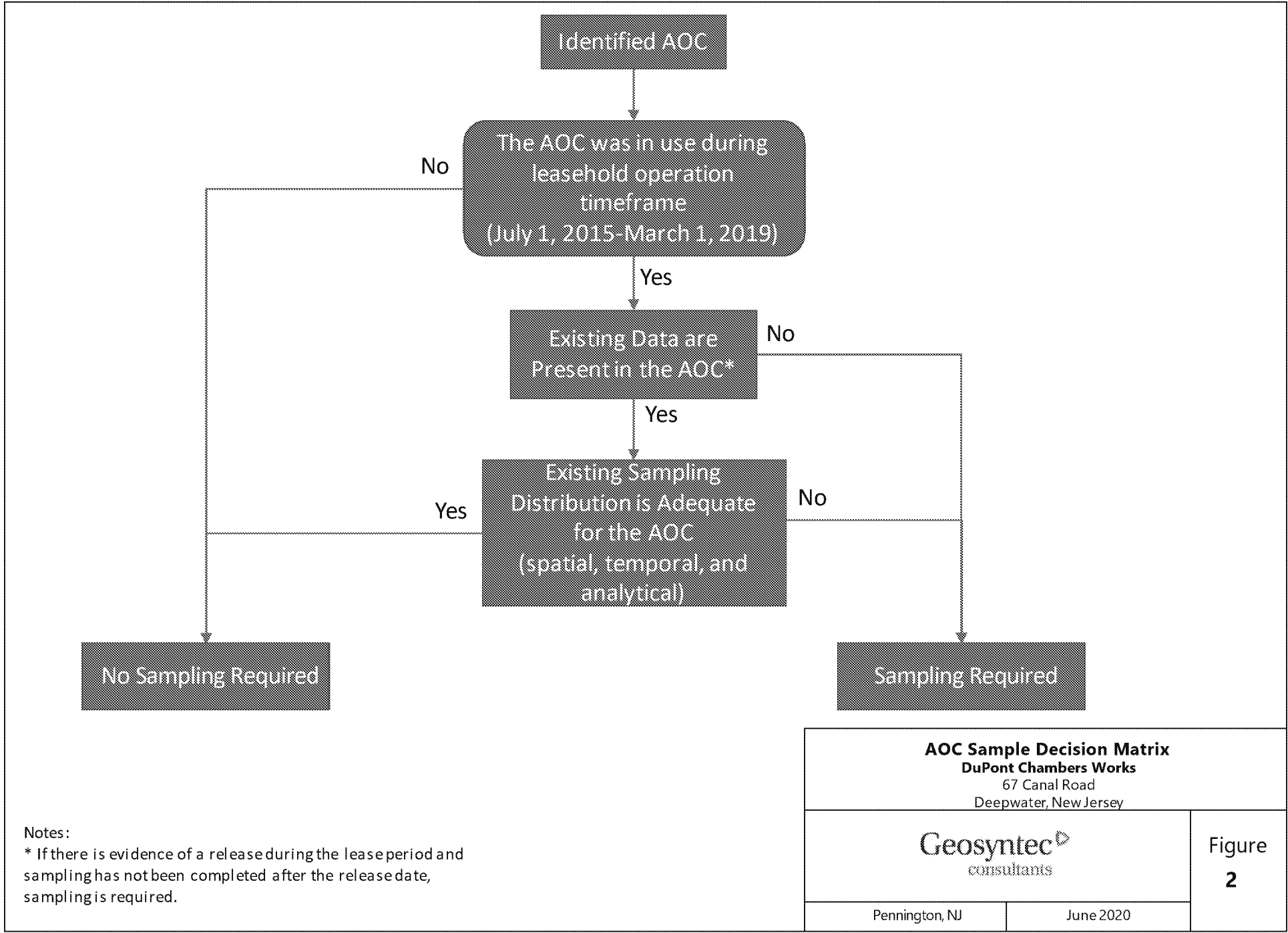
The majority of the Site activities discussed in this Work Plan are intended to be initiated in the third quarter of 2020, coordinated with active facility operations in Area I. Below is a breakdown of the schedule, expected duration, and explanatory notes, prepared in accordance with the requirements outlined in N.J.A.C. 7:26E-4.2(b)1.

Task	Expected Duration	Notes
<b>Month 1 Activities</b>		
Geophysical Survey	1 day	To be conducted before any invasive subsurface investigatory methods are initiated
Sample Mark-Outs	1 day	Geosyntec mark outs, likely to be concurrent with the geophysical survey, but could extend beyond geophysical survey work
Sample Collection	2 days	To be conducted in coordination with on-Site operation activity schedules
<b>Month 2 and 3 Activities</b>		
Data Collection and Interpretation	2 months	-
<b>Month 4 Activities</b>		
Reporting	1 month	-



# FIGURES





Internal info: path, date revised, author

# TABLE

TABLE 1: PROPOSED AOC SOIL SAMPLE SUMMARY  
67 Canal Road  
Deepwater, New Jersey

Area	AOC Name	AOC Type	AOC Description	Preliminary Findings	Review of Existing Analytical Data and Remedial Status	Recommendation for Additional Sampling Evaluation	Proposed Sampling	Proposed Analytical Parameters	Proposed Sampling Depth	Number of Proposed Boreholes	Number of Proposed Samples
<b>I</b> (FMDL Area) Case#E201917 6036	I-AOC-A1	AST/Reactor	Reacts chemicals to form final product	AST reactor vessel has secondary containment in the form of trench drains running below the AST/Reactor vessel. These trench drains (I-AOC-C2) direct flow to the sump and treatment system.	No data in this AOC area.	No sampling proposed as any release would be captured in the secondary containment and enter the trench drain system.	-	-	-	-	-
	I-AOC-A2	Process AST	Used in process operations	ASTs have secondary containment in the form of trench drains running around the ASTs. These trench drains (I-AOC-C2) direct flow to the sump and treatment system.	No data in this AOC area.	No sampling proposed for the AST as a release would be captured in the secondary containment and enter the trench drain system.	-	-	-	-	-
	I-AOC-A3	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A4	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A5	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A6	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A7	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A8	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A9	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A10	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A11	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A12	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A13	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A14	Process AST	Used in process operations		No data in this AOC area.						
	I-AOC-A15	Carbon Treatment AST	Used to pre-treat wastewater effluent from process operations, prior to discharge to Regional Sump A	These ASTs contain carbon to treat the wastewater from the trench system (I-AOC-C1 and I-AOC-C2) and local sump (I-AOC-C6) prior to discharge to the Regional Sump A (I-AOC-C12).	No data in this AOC area.	No sampling proposed for the AST as a release would be captured in the secondary containment and enter the trench drain system.	-	-	-	-	-
	I-AOC-A16	Carbon Treatment AST	Used to pre-treat wastewater effluent from process operations, prior to discharge to Regional Sump A		No data in this AOC area.						
	I-AOC-A17	Carbon Treatment AST	Used to pre-treat wastewater effluent from process operations, prior to discharge to Regional Sump A		No data in this AOC area.						
	I-AOC-A18	Decanted Water AST	Stores decanted water	This AST does not contain hazardous material. Tank ID TS-680	No data in this AOC area.	No sampling required as there is no hazardous material stored in this AOC.	-	-	-	-	-
	I-AOC-A19	Overflow AST for Sump	Water is pumped from FMDL sump (I-AOC-C6) into this AST, treated, then discharged to Regional Sump A	This AST contains overflow of water from the local sump (I-AOC-C6), should the sump receive more water than can be treated.	No data in this AOC area.	No known or suspected discharges from this AST, therefore, no investigation is required.	-	-	-	-	-
	I-AOC-A20	Overhead Pipelines	Overhead pipeline from Chemicals supplying gaseous tetrahydroethylene.	These pipelines contain gaseous tetrahydroethylene supplied by Chemicals.	No data in this AOC area.	A release would be to the atmosphere and not to Site soil or groundwater. Therefore, no investigation is required.	-	-	-	-	-
	I-AOC-A21	Sanitary Wastewater Holding Tank	Receives sanitary waste water flow only from FMDL building from I-AOC-22, is periodically vacuumed out and the wastes disposed offsite.	The holding tank receives sanitary waste water flow, not process waste.	No data in this AOC area.	This AOC does not receive process waste or hazardous waste. Therefore, no investigation is required.	-	-	-	-	-
	I-AOC-A22	Pumping Station	Pumps sanitary waste water from the FMDL building sanitary wastewater holding tank (I-AOC-A21) to the WWTP	Identified on trench drain GIS layer and figure 2	No data in this AOC area.	This AOC was not in use during the lease period.	-	-	-	-	-
	I-AOC-A23	AST	AST identified as "K560" on outside trench drawing provided by DuPont located on the 2nd floor of the FMDL building	Identified on the outside trench drawing provided by DuPont	No data in this AOC area.	No known or suspected discharges from this AST, therefore, no investigation is required.	-	-	-	-	-
	I-AOC-A24	AST	AST identified as "TS-571" on outside trench drawing provided by DuPont located on the 2nd floor of the FMDL building	Identified on the outside trench drawing provided by DuPont	No data in this AOC area.	No known or suspected discharges from this AST, therefore, no investigation is required.	-	-	-	-	-

TABLE 1: PROPOSED AOC SOIL SAMPLE SUMMARY  
67 Canal Road  
Deepwater, New Jersey

Area	AOC Name	AOC Type	AOC Description	Preliminary Findings	Review of Existing Analytical Data and Remedial Status	Recommendations for Additional Sampling Evaluation	Proposed Sampling	Proposed Analytical Parameters	Proposed Sampling Depth	Number of Proposed Locations	Number of Proposed Samples
I (FMDL Area) Case#E201917 6036	I-AOC-A-23	AST	AST identified as "TS-677" on outside trench drawing provided by DuPont located on the 2nd floor of the FMDL building.	Identified on the outside trench drawing provided by DuPont	No data in this AOC area.	No known or suspected discharges from this AST, therefore, no further evaluation is required.	-	-	-	-	-
	I-AOC-F1	Cylinder Storage Area	Cylinders provided by Chemours containing gaseous perfluoromethylcyclohexane.	Cylinders contain gaseous material.	No data in this AOC area.	A release would be to the atmosphere and not to Site soil or groundwater. Therefore, investigation is required.	-	-	-	-	-
	I-AOC-F2	Exterior Storage Area	Exterior storage area.	A storage area denoted on diagrams sent by DuPont	No data in this AOC area.	Arsenic acid hydride (5wt%) and sulfuric acid (5wt%) solutions stored here in secondary containment. No documented or suspected spills since 2015. Therefore, No investigation is required.	-	-	-	-	-
	I-AOC-F3	Previous Cylinder Storage Area	Area identified as storing cylinders on aerial imagery.	During the 24 September Site visit, a maintenance building was being constructed in this area.	No data in this AOC area.	Empty and full perfluoromethylcyclohexane cylinders. This material is a gas at standard atmospheric conditions, therefore no release to soil or groundwater would be possible. No investigation is required.	-	-	-	-	-
	I-AOC-C5	Trench Drains	Trench drains located within process areas, flowing to FMDL sump (I-AOC-C6).	Trench drains along the eastern side of the facility, connected to the solvent recovery building (I-AOC-A15 through I-AOC-A17) and other areas of the facility.	No data in this AOC area.	Sampling to be performed at a frequency of one per 50 feet. The samples will be collected from exterior locations, as sampling within the building is unlikely to be possible.	One boring located every 50 feet, biased to the nearest crack (if present) and within a maximum of two feet from the trench and at a depth corresponding to the bottom of the trench.	VOCs, SVOCs, EPH, gran-size, Metals+Hg	Six-inch interval corresponding to base of trench drain 2.5 - 3 ft. below first sample.  A shallow soil sample will be collected from the sample depth corresponding to the bottom of the trench. An additional sample will be collected from a deeper depth interval for vertical delineation. Because VOCs are a contaminant of concern, the soil borings will be advanced to the water table, top of competent bedrock, or ten feet below ground surface, whichever is encountered first.	2	4
	I-AOC-C6	Trench Drains	Trench drains located within process areas, flowing to FMDL sump (I-AOC-C6).	Main trench drain system servicing the processing area, including the ASTs (I-AOC-A2 through I-AOC-A14), AST reactor (I-AOC-A1), and compressor (I-AOC-F1).	No data in this AOC area.	Sampling to be performed at a frequency of one per 50 feet. The samples will be collected from exterior locations, as sampling within the building is unlikely to be possible.	No samples to be collected from inside the building as discharges inside the building would flow within the trench drains and enter the exterior trench drains. One boring located every 50 feet, biased to the nearest crack (if present), within a maximum of two feet from the trench and at a depth corresponding to the bottom of the trench.	VOCs, SVOCs, EPH, gran-size, Metals+Hg	Six-inch interval corresponding to base of trench drain 2.5 - 3 ft. below first sample.  A shallow soil sample will be collected from the sample depth corresponding to the bottom of the trench. An additional sample will be collected from a deeper depth interval for vertical delineation. Because VOCs are a contaminant of concern, the soil borings will be advanced to the water table, top of competent bedrock, or ten feet below ground surface, whichever is encountered first.	5	10
	I-AOC-C7	Aramid Trench Drains	Trench drains mapped in ABCOM's GIS layer.	These features are mapped in ABCOM's GIS layer, but they are not connected to FMDL's trench drain system.	No data in this AOC area.	These trench drains were not in use during the lease period. Therefore, no sampling is required.	-	-	-	-	-
	I-AOC-C8	Aramid Trench Drains	Trench drains mapped in ABCOM's GIS layer.		No data in this AOC area.						

TABLE 1: PROPOSED AOC SOIL SAMPLE SUMMARY  
67 Canal Road  
Deepwater, New Jersey

Area	AOC Name	AOC Type	AOC Description	Preliminary Findings	Review of Existing Analytical Data and Historical Status	Recommendations for Additional Sampling Evaluation	Proposed Sampling	Proposed Analytical Parameters	Proposed Sampling Depth	Number of Proposed Releases	Number of Proposed Samples
<b>I</b> (FMDL Area) Case#E201917 6036	I-AOC-C1	Animals Trench Drains	Trench drains mapped in ABCOM's GIS layer.	These features are mapped in ABCOM's GIS layers, but they're not connected to FMDL's trench drain system, but appear to have perhaps in the past.	No data in this AOC area.	These trench drains were not in use during the lease period. Therefore, no sampling is required.	-	-	-	-	-
	I-AOC-C2	FMDL Sump	Sump collecting wastewater from FMDL operations and trench drain (I-AOC-C2). Water is pumped to overflow AST (I-AOC-A19), treated in carbon treatment ASTs (I-AOC-A15 through I-AOC-A17), then pumped to Regional Sump A.	Sump inspection report noted some repair work needed to the concrete coating. However, this coating is not designed to be a liner against chemical infiltration through the concrete and is instead designed to protect the concrete from erosion/decay due to the water flowing across it.	No data in this AOC area.	No releases were recorded at this sump. The sump integrity is intact. The repairs to the protective coating are not associated with chemical protection and therefore the need to repair this coating doesn't affect the determination of whether sampling is needed or not.	-	-	-	-	-
	I-AOC-C3	Sump in Solvent Recovery Room	Sump located in northwestern corner of solvent recovery room.	Sump is a carbon bed treatment room. Wastewater on the discharge line is periodically dumped into the sump area to drain contents of the discharge line to A Regional Tank when there are freezing conditions. Flow is directed back into FMDL Sump during non-freezing conditions.	No data in this AOC area.	AOC receives treated water and therefore no further investigation is required.	-	-	-	-	-
	I-AOC-C4	Sump	Mapped in ABCOM GIS layer.	Sump that receives reverse osmosis rejected water. Not in contact with any process material.	No data in this AOC area.	The material discharged to this sump is clean water and therefore, no further investigation is required.	-	-	-	-	-
	I-AOC-C5	Overflow Sump	Shown on figures, but appears to have been replaced by the overflow AST (I-AOC-A19).	Sump received non-contact process water prior to May 2019. Sump has since been barricaded with concrete.	No data in this AOC area.	Non-contact process water directed here prior to May 2019. Sump was barricaded with concrete in May 2019. Since no process waste was directed to this sump, no further sampling is required.	-	-	-	-	-
	I-AOC-C6	Historical Sump	Sump located across creek from FMDL area. Non-contact cooling water was pumped to this sump until 2019, when the piping was removed and the non-contact cooling water redirected to the FMDL sump (I-AOC-C5).	Received non-contact cooling water and steam condensate from FMDL. Not used since 2019.	No data in this AOC area.	The material discharged to this sump is non-contact water and therefore, no further investigation is required.	-	-	-	-	-
	I-AOC-C7	Historical Aboveground Piping to Historical Sump	Piping removed in 2019, which directed non-contact cooling water to the historical sump (I-AOC-C10).	Piping directing non-contact cooling water to the historical sump (I-AOC-C10).	No data in this AOC area.	The material discharged to this sump is non-contact water and therefore, no further investigation is required.	-	-	-	-	-
	I-AOC-C11	Regional Sump A	Large aboveground sump/AST receiving water from FMDL (~1%) and from Chemours (~99%).	Regional sump which receives 1% of its volume from FMDL and the remaining 99% from Chemours' activities. The sump receives treated water from FMDL trench system.	No data in this AOC area.	No sampling required as there is no evidence of a release and this sump served other operators beside DuPont.	-	-	-	-	-
	I-AOC-C13	Aboveground Piping to Regional Sump	Piping leading from carbon treatment area to Regional Sump A.	Piping venting treated water to Regional Sump A.	No data in this AOC area.	No sampling required as there is no evidence of a discharge nor suspicion of a discharge.	-	-	-	-	-
	I-AOC-C14	Wash Sink in Process Area	Sink located in process area for washing hands. No indication that process wastes were disposed of in sink.	Wash sink in process area that did not receive process waste.	No data in this AOC area.	No sampling required as any liquids would be collected by the trench drain system, which is being investigated.	-	-	-	-	-
	I-AOC-C15	Splash Pad	Splash pad identified on the outside trenches drawing provided by DuPont.	The splash pad was identified on the outside trench drawing north of the FMDL building. Water from a steam and tank jacket header from tanks I-AOC-A23 through -A25 discharged through piping and out onto the splash pad. Based on aerial photographs, this AOC appears to still be present in the FMDL area. It was not observed during the 24 September 2019 Site visit.	No data in this AOC area.	The material discharged to this sump is non-contact water and therefore, no further investigation is required.	-	-	-	-	-
	I-AOC-C16	Historic Fill	Mapped by NJDEP.	Historic fill placed prior to the start of the FMDL operations.	No data in this AOC area.	No sampling required as this material pre-dates the FMDL operations and this is a "multi-tenant property". Therefore no investigation is required.	-	-	-	-	-

Area	AOC Name	AOC Type	AOC Description	Preliminary Findings	Review of Existing Analytical Data and Remedial Status	Recommendations for Additional Sampling/Evaluation	Proposed Sampling	Proposed Analytical Parameters	Proposed Sampling Depth	Number of Proposed Borings	Number of Proposed Samples	
I (FMDL Area) Case#E2019176 036	I-AOC-F1	Compressor	Located in adjacent room to reactor. Blowdown discharge is directed to the adjacent trench drain.	This compressor services the process operations and discharges to the trench drain system (I-AOC-C2).	No data in this AOC area.	The blowdown discharge enters the trench drain, which is being investigated, no sampling is required around the compressor.	-	-	-	-	-	
	I-AOC-F2	Transformer	Pole-mounted transformer identified in the 2017 PCB Report	According to the 2017 PCB report, this transformer was installed in 2000 and contained non-PCB oil. It was not observed during the 24 September 2019 Site visit.	No data in this AOC area.	Transformers across the Site are managed by Chemours. Based on the available information, this transformer was installed in 2000 and never contained PCB-oil. Therefore no further investigation is needed.	-	-	-	-	-	
AOC not requiring additional field evaluation.										Totals:	7	14
AOC requiring additional field investigation.												
AOC not related to DuPont operations and/or not DuPont's responsibility. No sampling proposed.												
* AOC was identified through historic data provided by AECOM.												

Notes:

1. Other regulatory programs include separate NJDEP Case Numbers and the Federal Superfund Site for which Chemours is the responsible party.

1. 2015 Soil Remediation Standards including Impact to Groundwater were included in the sampling data provided by AECOM. However, reporting limits were not provided and therefore may not be sufficiently low enough to meet Soil Remediation Standards.

2. A shallow soil sample will be collected from the sample depth either exhibiting the most impacts, as determined through visual or PID screening, or from the sample depth most likely to have received a discharge, based on the specific AOC and Soils Guidance. An additional sample will be collected from a deeper depth interval for vertical delineation. If sampling within a boring cannot be biased, then samples should be collected from just above the water table, top of competent bedrock, or ten feet below ground surface, whichever is encountered first.